

SR.NO.	PARTICULARS	QTY.	UNIT
A	New Cooling Tower - for Chiller Plant		
1	Supply, Installation, Testing & Commissioning of New Cooling Tower - Advance make, Induced draft counter flow, Model No. 4RM-73 or equivalent approve make as mention below. No. of cell - 4 cell / No. of fans - 4 Inlet Outlet Temperature - 36 / 31 Deg. C Wet Bulb Temperature - 28.3 Deg.C Cooling Capacity - 918750 Kcal / Hr. per cell Total Cooling Capacity - 3675000 Kcal / Hr Water flow rate - 183.75 CMH per cell Overall dimentions - 12450mm x 3300mm x 4625mm All cooling tower nut & Bolts in SS material. Operating weight of CT - 16000 Kg.. Location - Mumbai. Complete as directed by Architect / Consultant / SBIIMS. Approve Make - Advance / Paharpur / Bhel	1	EACH
2	MS Pipe		
	SITC of MS ERW piping, C class, 6mm Thk. Complete as directed by Architect / Consultant / SBIIMS. Including welding, Fabrication, Gas cutting, Fittings, necessary supports, painting with red oxide primer & machine green shade oil paint along with provision of scaffolding & ladders make - Jindal / Zenith / Tata		
2.1	300 mm	400	RMT
2.2	250 mm	42	RMT
2.3	100 mm	18	RMT
2.4	80 mm	48	RMT
2.5	50 mm	200.00	RMT
2.6	40 mm	48.00	RMT
3	Valves		
	SITC of Butterfly valve , PN 10, CI Body. Complete as directed by Architect / Consultant / SBIIMS. Along with flanges, nut bolts & rubber gasket. make- Advnace / Honeywell / Audco-L&T		
3.1	300 mm	7.00	EACH
3.2	250 mm	8.00	EACH
3.3	100 mm	4.00	EACH
3.4	80 mm	4.00	EACH
3.5	50 mm	2.00	EACH
4	SITC of Ball valve 40mm, PN 10, Brass Body. Complete as directed by Architect / Consultant / SBIIMS. make- Advnace / Honeywell / Audco-L&T / Leader / Zoloto	8.00	LOT
5	SITC of Pot Strainer 300mm, PN 10, CI Body. Complete as directed by Architect / Consultant / SBIIMS. make- Advnace / Honeywell / Trishul Make / Leader /	1.00	EACH
6	SITC of Balancing valve 250mm, PN 10, CI Body. Complete as directed by Architect / Consultant / SBIIMS. make - Advance / L&T-Audco / Honeywell / Castle	4.00	EACH

SR.NO.	PARTICULARS	QTY.	UNIT
7	SITC of Pump, Horizontal, Centrifugal type monoblock pump 450LPM & 30 Mtr. Head capacity, with all required valves, NRV & accessories - for Make up water system for cooling tower (1W + 1S). Complete as directed by Architect / Consultant / SBIIMS. make - Kirloskar / Grundfoss / Crompton	2.00	EACH
8	Electrical connection		
8.1	SITC of AL. Armored Cable - 3C x 10 Sqmm Complete as directed by Architect / Consultant / SBIIMS. make - Polycab / Havells / RR Kabel	3600.00	RMT
9	SITC of GI Cable tray 12" width & GI Earthing strip 40mmx6mm thk. Complete as directed by Architect / Consultant / SBIIMS.	250.00	RMT
10	SITC of Structural steel suspended from ceiling in the basement for Pipe supports such as L Angle / ISMC / ISMB sections as per the drg. Attached fabricated, welding, gas cutting, nut bolts, revets etc. including paint. Complete as directed by Architect / Consultant / SBIIMS. (The rate is inclusive of scaffolding up to 4 meter high)	3000.00	KG
11	Connection of new piping to existing condenser water headers - SITC of new cooling tower piping connections with welding, fabrication & gas cutting & necessary isolation valves by draining of condenser water & refilling of water after completion of new piping connections. Manual air purging & leak testing, without disturbing the cooling in office. These work has to be carried out on 2nd or 4th Saturday sundays or on holidays with prior permission from Architect / Consultant / SBIIMS. Complete as directed by the Architect / Consultant / SBIIMS.	2.00	LOT
	Total Cost Of New Cooling Towers Including Piping & Installation Work		

B	Dismantling and shifting and re-installation of Existing Cooling Tower on New Location Ground floor - for existing DG Plants		
1	Termination, Dismantling & Shifting of existing Cooling towers from 7th floor to ground floor location shown in the Drg. Complete as directed by Architect / Consultant / SBIIMS.	2.00	EACH
2	Reinstallation of existing cooling tower at ground floor location shown in the Drg. Complete as directed by Architect / Consultant / SBIIMS.	2.00	EACH
3	Supply & Installation for Replacement of PVC fins from existing cooling tower	2.00	LOT
4	MS Pipe		
	SITC of MS ERW piping, C class, 6mm Thk. Complete as directed by Architect / Consultant / SBIIMS. Including welding, Fabrication, Gas cutting, Fittings, necessary supports, painting with red oxide primer & machine green shade oil paint along with provision of scaffolding & ladders make - Jindal / Zenith / Tata		
4.1	200 mm	365.00	RMT
4.2	150 mm	24.00	RMT
4.3	100 mm	6.00	RMT
4.4	80 mm	12.00	RMT
4.5	50 mm	36.00	RMT
4.6	40 mm	12.00	RMT
5	VALVES		
	SITC of Butterfly valve , PN 10, CI Body. Complete as directed by Architect / Consultant / SBIIMS. Along with flanges, nut bolts & rubber gasket. make- Advnace / Honeywell / Audco-L&T		

SR.NO.	PARTICULARS	QTY.	UNIT
5.1	200 mm	5.00	NOS
5.2	150 mm	4.00	NOS
5.3	100 mm	2.00	NOS
5.4	80 mm	2.00	NOS
5.5	50 mm	1.00	NOS
5.6	SITC of Ball valve 40mm, PN 10, Brass Body. Complete as directed by Architect / Consultant / SBIIMS. make - Advnace / Honeywell / Audco-L&T / Leader / Zoloto	4.00	NOS
5.7	SITC of Pot Strainer 200mm, PN 10, CI Body. Complete as directed by Architect / Consultant / SBIIMS. make - Advance/ Honywell / Trishul / Castle	1.00	NOS
5.8	SITC of Balancing valve 150mm, PN 10, CI Body. Complete as directed by Architect / Consultant / SBIIMS. make - Advance / L&T-Audco / Honeywell / Castle	2.00	NOS
6	Electrical connection		
6.1	SITC of AL. Armored Cable - 10Sqmm X 3C,. Complete as directed by Architect / Consultant / SBIIMS. make - Polycab / Havells / RR Kabel	1800.00	RMT
7	SITC of GI Cable tray 12" width & GI Earthing strip 40mmx6mm thk. Complete as directed by Architect / Consultant / SBIIMS.	100.00	RMT
	Total Cost Of Existing Cooling Tower Dismanting and shifting and installation on Ground floor at New Location - for DG Plant		

C	Miscellaneous Work at Ground, Basement & Terrace		
1	Cutting & modification & Reinstallation of Domestic water pipes. Complete as directed by the Architect / Consultant / SBIIMS. make - Jindal / Zenith / Tata		
1.1	100 NB	90.00	RMT
1.2	65 NB	12.00	RMT
1.3	50 NB	12.00	RMT
2	Dismantaling, shifting & refitting of AC outdoor unit at parking level - 1 work including- additional cu piping with insulation, nitrogen tesing & flushing, Vaccumizing & gas top up (near condenser pipe shaft area).	4.00	SET
3	Dismantaling, shifting & modification of exhaust ducting at parking level -1 (near condenser pipe shaft area). Complete as directed by the Architect / Consultant / SBIIMS.	1.00	LOT
4	Dismantaling, shifting & modification of exhaust ducting at parking level -1 (near entrance ramp area). Complete as directed by the Architect / Consultant / SBIIMS.	1.00	LOT
5	Dismantaling, shifting & re-routing of cables & earthing stips at parking level -1 (near condenser pipe shaft area) Complete as directed by the Architect / Consultant / SBIIMS.	1.00	LOT
6	Dismantaling, shifting & re-routing of CHW pipes at plant room level -2 Complete as directed by the Architect / Consultant / SBIIMS.	1.00	LOT
	Total Cost For Miscellaneous Work at Ground, Basement & Terrace		

SR.NO.	PARTICULARS	QTY.	UNIT
D	Fire Related work on the Ground Floor, Terrace Level & In Basement		
1	Shifting of Fire Hydrant as per the direction of Fire brigade with necessary additional pipe of 6meter with all accessories including cutting, welding, lifting, painting, scaffolding etc. The rate including necessary permission from fire brigade Dept. Complete as directed by the Architect / Consultant / SBIIMS.	1.00	EACH
2	Dismantling, shifting & modification of Fire fighting system at parking level -1 (near entrance ramp area). necessary additional pipe of 6meter with all accessories including cutting, welding, lifting, painting, scaffolding etc. The rate including necessary permission from fire brigade Dept. Complete as directed by the Architect / Consultant / SBIIMS.	1.00	LOT
3	Cutting & modification & Reinstallation of Fire Fighting system pipes. Complete as directed by the Architect / Consultant / SBIIMS. make - Jindal / Zenith / Tata		
3.1	150 NB	36.00	RMT
3.2	100 NB	120.00	RMT
	Total Cost For Fire Related work on the Ground Floor, Terrace Level & In Basement		

E	Structural Steel work for New Cooling Tower & existing DG Cooling Tower near New Cooling Tower on Ground Floor		
1	Structural Steel Work on Slab Breaking & removing of flooring including (breaking by chiselling, wedging etc), stacking the serviceable material and disposing off the debris separately beyond 500 mt. from the building premises and spreading the debris as directed etc. complete. Fabricating and erecting in position structural steel work for all types of members for columns, beams, ties and other structural members as per drawing and design, at all heights, including welding in rolled steel sections and plates, with all necessary nuts, bolts, revets, gussets, welding rods etc. complete and application of epoxy primer as per manufacturer's specifications or as directed by consultant. Fabricating & fixing MS Plates in structural steel work (as cleats, gussets etc.) as per detail drawing and design at all heights including necessary hardwares and accessories etc complete.	5000.00	KG
2	Concrete Work Near Pipe Connection Providing and fixing in position HYSD steel reinforcement of various diameters for R.C.C. pedestal as per the detailed designs, drawings including cutting, bending hooking the bars binding with GI wires or tack Providing & laying M25 grade reinforced cement concrete (RCC) for various RCC works at all heights, using river sand, 20 mm nominal size well-graded approved quality aggregate as per approved design mix including all leads and lifts; including adding approved admixtures vibrating / compacting, curing, scaffolding as required establishing dewatering system by pumping / bailing out water, cleaning, preparing surfaces, junctions, hacking closely, roughening the surface if special finish is to be provided etc. including shuttering and excluding reinforcement; complete to the satisfaction of the consultant. Providing & laying M25 grade reinforced cement concrete (RCC) for various RCC works at all heights, using river sand, 20 mm nominal size well-graded approved quality aggregate as per approved design mix including all leads and lifts; including adding approved admixtures vibrating / compacting, curing, scaffolding as required establishing dewatering system by pumping / bailing out water, cleaning, preparing surfaces, junctions, hacking closely, roughening the surface if special finish is to be provided etc. including shuttering and excluding reinforcement; complete to the satisfaction of the consultant. The items also include providing sand faced plaster externally in two coats with first coat of plaster 12 mm thick in C.M. of 1:4 mix,		

SR.NO.	PARTICULARS	QTY.	UNIT
	adding water proofing compound as per the manufactures's specifications in proper line & level, including making the undulations as a key to 2nd coat of plaster of minimum 8 mm thick after at least 4 days period of curing of the 1st coat in C. M. 1:3 mix in proper line & level finishing the surface by taking out the grains (sand faced treatment) with necessary scaffolding ('H' frames) and covering the scffolding with transparent mesh during the work, proper curing etc. complete. complete as directed by the Architect/Consultant/SBIIMS.	4.00	CUM
3	Core cutting 350MM DIA Making core cutting of 350mm & 250mm dia holes 8 in number by way of machines in the ground floor slab with out damaging the structure. Complete as per the direction of the Architect/Consultant/SBIIMS.	15.00	EACH
4	Waterproofing for the Ground Floor Slab below New Cooling Tower Providing and applying crack bridging, spray applied waterproofing system based on advanced polymeric materials consisting of multilayered system comprising of a series of substrate sealers, primers, waterproofing membranes, for existing terrace area on concrete screed, surfaces finished with UV & weather resisitant protective Topcoat of approved manufacturers such as BASF/GRACE/KEMPER as directed by the Architect / SBIIMS.	99.00	SQ.MT.
	Total Cost For New Structure for Cooling Towers on Ground Floor		

F	Buy Back of Cooling Tower & Allied Material		
1	Buy back of existing cooling towers by dismantaling the 4 cooling towers, M.S. pipes, m.s. brckets, etc. including shifting to ground from the terrace by way of pulley without damaging the structure and carting away the debris after taking permission from BMC or Govt. environment autorites at dumping ground. the contractor should submit the necessary permission before dismantaling. Complete as directed by the Architect / Consultants / SBIIMS.	1.00	LUMSUM
2	Buy back of existing cooling towers by dismantaling the 4 cooling towers, M.S. pipes, m.s. brckets, etc. including shifting to ground from the terrace by way of pulley without damaging the structure and carting away the debris	6.00	Nos
	Total Buy Back Cost		

	SUMMARY		
A	Total Cost Of New Cooling Towers Including Piping & Installation Work		
B	Total Cost Of Existing Cooling Tower Dismanting and shifting and installation on Ground floor at New Location - for DG Plant		
C	Total Cost For Miscellenous Work at Ground, Basement & Terrace		
D	Total Cost For Fire Related work on the Ground Floor, Terrace Level & In Basement		
E	Total Cost For New Structure for Cooling Towers on Ground Floor		
F	Total Buy Back Cost		
G	Total Cost Of Work		

GST WILL COST YOU EXTRA.